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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/619,486	07/16/2003	Erich Ronneberger	RONNEBERGER2	7277	
1444 7	1590 04/15/2004		EXAM	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C.			ROSS, DANA		
624 NINTH STREET, NW SUITE 300		ART UNIT	PAPER NUMBER		
	N, DC 20001-5303		3722		
			DATE MAILED: 04/15/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/619,486	RONNEBERGER, ERICH				
Office Action Summary	Examiner	Art Unit				
	Dana Ross	3722				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Faiture to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status	,					
1) Responsive to communication(s) filed on 16 July 2003.						
	Oh) M. This policy is non-final					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) is/are withdra  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-3,5,7-10 and 15-18 is/are rejected.  7) ☐ Claim(s) 4,6 and 11-14 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9)⊠ The specification is objected to by the Examine 10)⊠ The drawing(s) filed on 16 July 2003 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11)□ The oath or declaration is objected to by the E	☑ accepted or b)☐ objected to drawing(s) be held in abeyance. Setion is required if the drawing(s) is of	ee 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applica ority documents have been receiv au (PCT Rule 17.2(a)).	tion No ved in this National Stage				
Attachment(s)  1)   Notice of References Cited (PTO-892)  2)   Notice of Draftsperson's Patent Drawing Review (PTO-948)  3)   Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 07/2003.	4) Interview Summar Paper No(s)/Mail I 5) Notice of Informal 6) Other:	y (PTO-413) Date Patent Application (PTO-152)				

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#### **DETAILED ACTION**

## Specification

1. The disclosure is objected to because of the following informalities: The disclosure, for example on page 3, line 13, refers to the claims by numbers. Applicant is required to amend the specification to remove these references and to incorporate into the disclosure the subject matter of these claims that is necessary to the understanding of the invention.

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 8, 9, 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8, 15 and 17, it is unclear if "coolant/lubricant" means "coolant and lubricant" or "coolant or lubricant". Clarification is required.

Claim 9, it is unclear if "the supply" refers to power, coolant and lubricant as a group, or to one individually. Clarification is required.

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# Claim Rejections - 35 USC § 102 or 103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-3, 5, 7, 10 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Pat. No. 4,584,794 (Hirohata).

Hirohata teaches a grinding machine with a bed 11, headstock 13 and tailstock 14 to support and rotate a work piece A along a longitudinal axis (col. 2,lines 24-30), a swivel head 30 with grinders B on the end front face (fig. 1) with a axis of rotation that intersects the longitudinal axis of the work A at right angles (col. 2, lines 63-65) with intermittent rotations depending on the method of machining used (col. 3, lines 3-9). This would include the swivel head swivellable through at least ±90° and the rotation of the tools would include a displacement of the tools parallel to the swivel axis.

Though Hirohata does not explicitly disclose the work spindle being located on a first slide, the first slide is implicitly shown in figures 1 and 2 to accommodate the minimal ability to adjust and tighten the work piece onto the work piece spindle.

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However, in the alternative, if the work spindle does not have a first slide for longitudinal movement, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the work spindle with a first slide movable in a longitudinal direction parallel to the work piece and the tool carriage 15 stationary in the longitudinal direction parallel to the work piece since a reversal of parts has been held to only involve routine skill in the art. In this instance, the purpose for reversal of the spindle longitudinal movement with the longitudinal movement of the workpiece is to provide for the longitudinal machining of the workpiece.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,584,794 (Hirohata) in view of U.S. Pat. No. 5,697,739 (Lewis et al.). Hirohata teaches all aspects of the above claim 1 rejection. Hirohata teaches a motor 33 on the back of the swivel unit away from the work spindle. Though Hirohata shows what appears to be a nozzle in figure 1 directed near the tool units B, Hirohata does not expressly disclose the coolant or lubricant supply to tools units B.

Examiner notes that it is well known in the art to have the power supply, coolant and lubrication systems as well as signal exchange between tool units and a machine control system taken from the back of a unit. As evidence that it is well known in the art to run the supply lines through the tool head in a direction away from the work spindle, Lewis et al. teaches an attachment for a tool spindle wherein the nozzle 96 directs coolant onto the tool via coolant lines 98 which are centrally located and run through the tool spindle (col. 5, lines 38-42) and an electrical connector assembly with a male electrical connector 79 and a female connector 81 with

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an electrical cable 83 that extends from the bottom of the male electrical connector through a bore 85 (col. 5, lines 16-35).

Therefore it would have been obvious to one of ordinary skill in the art to modify the grinder with multiple work tools B as taught by Hirohata to include the coolant and signal exchange as taught by Lewis et al. for the purpose of having a spindle assembly having a drive train drive train that is mechanically independent from the drive train of a movable spindle unit, for example (see Lewis et al. abstract).

#### Allowable Subject Matter

- 8. Claims 4, 6, 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. Claims 8-9 and 15-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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#### Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is (703) 305-7764. The examiner can normally be reached on Mon-Fri 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmr

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